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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/590,769	06/08/2000	Robert M. Lukas	034300-105	9907

7590 09/10/2003

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EXAMINER

SCHNEIDER, JOSHUA D

ART UNIT	PAPER NUMBER
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2182

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DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/590,769

Applicant(s)

LUKAS, ROBERT M.

Examiner

Joshua D Schneider

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 17-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 28-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

(It is unclear if these claims (17-27) are withdrawn or cancelled.)

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 7/24/2003 have been fully considered but they are not persuasive. The rejection makes clear that there is unambiguous means for "connection establishment" type network emulating an "always connected" type network.
2. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., allowing host applications to continue, but not user applications) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
3. With regards to the claim that there is no teaching or suggestion to attempt to reply to communications from the user terminal with any sort of emulation (page 12, lines 14-15), Hirviniemi teaches a response to the user terminal ARP request to the MAC manager for a destination address (column 2, lines 11-24). The response to the network request is from a remote user connected to a network element over an asynchronous modem link (column 1, lines 53-55). Furthermore, the structure of Richards referred to by the applicant (the modem being located on the host side and not the user side), is not necessary for rejection to be proper. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re*

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Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). The teachings of the references are combined to show Hirviniemi's asynchronous modem linked terminal connected over a WAN could emulate an "always connected" type connection by responding to the polls of Richards and the network requests of Hirviniemi.

4. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., dealing with different protocols) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 6, and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,802,285 to Hirviniemi in further view of U.S. Patent 4,853,954 to Richards. With regards to claim 1, Hirviniemi teaches the emulation of an "always connected" type protocol that may be over a "connection establishment" type network (column 1, lines 49-64). Hirviniemi teaches that upon initiation of a TCP/IP application request to start communication, the MAC manager provides a response so that the remote application believes it has received the correct reply. The application then starts sending data packets, and the MAC manager prepares the packets to be sent out through the modem link. Hirviniemi fails to explicitly teach that the

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emulation means is that of an “always connected” type. Richards teaches means for emulation of an “always connected” type I/O device driver even though the communications are transmitted over a “connection establishment” type network (see abstract and column 2, lines 57-60). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the modem of Richards with the protocol of Hirviniemi in order to create a system which provides a transparent network connection in order to allow user applications to continue processing without waiting for a connection to be established.

7. With regards to claim 2, the Hirviniemi reference teaches that “always connected” type network services are emulated to the computer application (column 2, lines 8-34).

8. With regards to claim 3, Hirviniemi teaches that the MAC manager intercepts the application ARP requests and generates responses so that the TCP/IP application begins sending data (column 2, lines 8-34).

9. With regards to claim 4, Hirviniemi teaches the network services are ARP services (column 2, lines 8-18).

10. With regards to claim 6, Hirviniemi teaches that ARP messages transmitted by the TCP/IP application software are intercepted, a response is sent back to the application with a physical address, and that upon receiving this response, the application perceives an “always connected” network connection and begins to transfer data packets (column 2, lines 8-34).

11. With regards to claim 8, Hirviniemi discloses the use of LAN communications and TCP/IP software as the LAN I/O driver (column 1, lines 12-20).

12. With regards to claim 9, Hirviniemi discloses the use of LAN internet type communications and TCP/IP software as the LAN internet I/O driver (column 1, lines 12-20).

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13. Claims 10-13, 15, 28-30, 33-35, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,802,285 to Hirviniemi and U.S. Patent 4,853,954 to Richards in further view of the applicant admitted prior art (AAPA).

14. With regards to claim 10, Hirviniemi teaches the emulation of an "always connected" type protocol that may be over a "connection establishment" type network (column 1, lines 49-64). Hirviniemi teaches that upon initiation of a TCP/IP application request to start communication, the MAC manager provides a response so that the remote application believes it has received the correct reply. The application then starts sending data packets, and the MAC manager prepares the packets to be sent out through the modem link. Hirviniemi fails to explicitly teach that the emulation means is that of an "always connected" type. Richards teaches means for emulation of an "always connected" type I/O device driver even though the communications are transmitted over a "connection establishment" type network (see abstract and column 2, lines 57-60). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the modem of Richards with the protocol of Hirviniemi in order to create a system which provides a transparent network connection in order to allow user applications to continue processing without waiting for a connection to be established. Hirviniemi fails to teach the use of a wireless modem. The AAPA teaches that a wireless modem is conventional in a computer (page 1, lines 10-14). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the AAPA taught wireless modem with the emulation system of Hirviniemi and Richards, to create a wire free computer system that is competitive in the modern computer market.

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15. With regards to claim 11, the Hirviniemi reference teaches that “always connected” type network services are emulated to the computer application (column 2, lines 8-34).

16. With regards to claim 12, Hirviniemi teaches that the MAC manager intercepts the application ARP requests and generates responses so that the TCP/IP application begins sending data (column 2, lines 8-34).

17. With regards to claim 13, Hirviniemi teaches the network services are ARP services (column 2, lines 8-18).

18. With regards to claim 28, 33, and 38, Hirviniemi teaches the emulation of an “always connected” type protocol that may be over a “connection establishment” type network (column 1, lines 49-64). Hirviniemi teaches that upon initiation of a TCP/IP application request to start communication by requesting a network address, the MAC manager provides a response to the request for a network address so that the remote application believes it has received the correct reply. Hirviniemi also teaches sending packets using the devices own address and an arbitrary destination address (column 2, lines 22-24). The application then starts sending data packets, and the MAC manager prepares the packets to be sent out through the modem link. Hirviniemi fails to explicitly teach that the emulation means is that of an “always connected” type. Richards teaches means for emulation of an “always connected” type I/O device driver even though the communications are transmitted over a “connection establishment” type network (see abstract and column 2, lines 57-60). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the modem of Richards with the protocol of Hirviniemi in order to create a system which provides a transparent network connection in order to allow user applications to continue processing without waiting for a connection to be established.

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Hirviniemi fails to teach the use of a wireless modem. The AAPA teaches that a wireless modem is conventional in a computer (page 1, lines 10-14). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the AAPA taught wireless modem with the emulation system of Hirviniemi and Richards, to create a wire free computer system that is competitive in the modern computer market.

19. With regards to claim 29 and 34, Hirviniemi teaches the network requests are ARP requests (column 2, lines 8-18).

20. With regards to claim 30 and 35, Hirviniemi teaches the network address being a MAC address that is a unique IP address (column 2, lines 11-22). Hirviniemi also teaches sending packets using the devices own address and an arbitrary destination address (column 2, lines 22-24).

21. With regards to claim 15, Hirviniemi teaches that ARP messages transmitted by the TCP/IP application software are intercepted, a response is sent back to the application with a physical address, and that upon receiving this response, the application perceives an "always connected" network connection and begins to transfer data packets (column 2, lines 8-34).

22. Claims 5, 7, 14, 16, 31-32, and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,802,285 to Hirviniemi and U.S. Patent 4,853,954 to Richards as applied to claims 1-4, 6, 8-13, 15, 28-30, 33-35, and 38 above, and further in view of U.S. Patent 6,028,848 to Bhatia et al.

23. With regards to claims 5 and 14, Hirviniemi fails to teach the use of DHCP type network services. Bhatia et al. teaches that DHCP network services in combination with the translating of addresses are well known (column 4, line 52, through column 6, line 49). It would have been

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obvious to one of ordinary skill in the art at the time of invention, to combine the network protocol emulation of Hirviniemi with the well-known DHCP services of Bhatia et al. in order to increase compatibility in a competitive computer market.

24. With regards to claims 7 and 16, Hirviniemi teaches the use of ARP and a MAC manager to emulate an "always connected" type connection to the application software, including sending messages back to the application, so that the application begins data transmission as if it were connected to an "always connected" type system (column 1, lines 51-59, and column 2, lines 8-34). Hirviniemi does not teach the same type of response system for DHCP services. The Bhatia et al. reference teaches that both DHCP and ARP services are known in address protocol emulation systems (column 4, line 52, through column 6, line 49). Bhatia et al. teaches that DHCP services are integrated with the routing and management processes and operate transparently to the computers, including message responses and maintaining an identifier stack. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the emulation system of Hirviniemi and the DHCP services of Bhatia et al. in order to create a system which interacts within a DHCP network environment, in order increase compatibility in a competitive computer market.

25. With regards to claim 31 and 36, Hirviniemi does not teach the same type of response system for DHCP services. Bhatia et al. teaches that DHCP network services in combination with the translating of addresses are well known (column 4, line 52, through column 6, line 49). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the emulation system of Hirviniemi and the DHCP services of Bhatia et al. in order to create a

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system which interacts within a DHCP network environment, in order increase compatibility in a competitive computer market.

26. With regards to claim 32 and 37, Hirviniemi teaches the network address being a MAC address that is a unique IP address (column 2, lines 11-22). Hirviniemi also teaches sending packets using the devices own address and an arbitrary destination address (column 2, lines 22-24).

Conclusion

27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D Schneider whose telephone number is (703) 305-7991. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Gaffin can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is (703) 892-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

JDS
September 5, 2003


JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100